Advisory Committee for the Sustained National Climate Assessment

Strategy for Preparing a Special Report:

Recommendations on a Sustained National Climate Assessment

<u>Purpose of this Document</u>: The National Oceanic and Atmospheric Administration (NOAA), on behalf of the Subcommittee on Global Change Research (SGCR), submitted the following request to the Advisory Committee:

"In order for the USG to implement a vision for Sustained Assessment in time for the 5th (and future) National Climate Assessment, NOAA requests, on behalf of the USGCRP and its member agencies, that the Advisory Committee for the Sustained National Climate Assessment develop a set of recommendations for a Sustained Assessment process by Spring 2018. We also request a progress or interim report by September 30, 2017. The recommendations should be feasible, realistic in terms of budget implications, and grounded in the Congressional mandate for a quadrennial assessment."

This document spells out the strategy the Advisory Committee will adopt to fulfill this request in a timely fashion. The document describes (1) four topics the Advisory Committee will address and (2) the main elements of the process it will follow. This strategy was developed with input from SGCR members, program managers of the USGCRP, staff of the National Assessment Coordination Office, and members of the Advisory Committee. The Advisory Committee may revise the list of topics and process based on new information it collects.

Context of Prior Recommendations, Subsequent Experience, and Changing Societal Needs: In 2013, the predecessor to this Advisory Committee, the National Climate Assessment Development and Advisory Committee (NCADAC), released a report that identified four "critical elements" of a sustained national climate assessment (SNCA) process (https://tinyurl.com/lfd5fdd). Since the release of the report, the USGCRP has completed the Third National Climate Assessment (NCA3), several special reports, and other products. The program and member agencies continue to engage with users of climate and global change information. And they have developed new activities and programs that are relevant to the SNCA. Beyond the activities of the USG, others such as states, cities, private sector firms, and non-governmental organizations (NGOs) have initiated their own activities and prepared SNCA-relevant products. The National Academy of Sciences and other advisory bodies have prepared subsequent recommendations, and the research literature on sustained assessment has expanded. The Advisory Committee will build on the 2013 NCADAC report and consider these subsequent developments as it prepares its recommendations.

<u>Topics to be Addressed</u>: The recommendations will address four topics identified through interactions with USGCRP and input from Advisory Committee members. These topics are overlapping, and the Advisory Committee will need include recommendations for coordinating related objectives or issues.

Topic 1: Core Products and Activities of the Sustained Assessment Process

The Advisory Committee will develop recommendations on a "core set" of NCA products and activities to serve as the foundation for the SNCA. Example products could include time-stamped observational data sets, projections of future conditions, indicators, periodic "state of science of US climate conditions", quadrennial reports, and technical guidelines. Example activities or programs could include regional science organizations, networks of sustained assessment participants, and an advisory committee of users and producers of SNCA products. The Advisory Committee envisions developing recommendations to address several specific topics or issues, for example:

- Alternative criteria for determining what is "core";
- Efficient use of core products in producing quadrennial reports and other mandated products;
- Responsibilities of USGCRP and other actors for products that are "core" for different users (e.g., for analysis of vulnerabilities and adaptation strategies at state/municipal levels);
- The hand-off from the core set of products and activities to derived products for specific objectives such as evaluation of risks or identification of solutions.

Topic 2: Products Derived from the Core Set of SNCA Resources

For this topic, the Advisory Committee will develop recommendations on how to foster a "virtuous cycle" that facilitates use of the core set of SNCA resources by stakeholders to develop products to meet their needs, and a feedback of information into the process that helps to evaluate existing products and contribute knowledge to new ones. The Climate Resilience Toolkit (CRT—https://toolkit.climate.gov/content/home) includes examples of such products that provide maps, scenarios, guidelines, and other information at local to regional scales. Specific issues likely to be addressed include:

- Developing a clear structure for how core NCA products (CRT, Global Change Information System, etc.) interact and feedback into future NCA activities;
- Developing clear mechanisms of engagement for non-federal participants (Partnership, program, and infrastructure models);
- Engagement of professional associations (e.g., American Society of Civil Engineers) and others to develop recommendations for evaluation processes for current and future products.

Topic 3: Modes of Engagement with the NCA Process

Many constituent partnerships, including end users and capacity-building boundary entities, have been formed during the NCA process. To promote engagement and dialogue, the USGCRP sustains the NCANet, a network of some 200 entities that participate in the assessment process. Maintaining and strengthening existing partnerships, and developing new forms of engagement, is challenging for the USGCRP, Agencies, and programs in the context of the legal constraints and capacity limitations. In developing recommendations on this topic, the Advisory Committee will consider

what has been learned since the NCADAC 2013 report about engagement in the NCA process. Recommendations may be provided for several specific topics:

- Characterize modes of and mechanisms for existing engagement of end users and boundary entities (including private sector climate service providers);
- Identify agency-specific and external engagement processes and processes that may be modified for the NCA context to strengthen existing partnerships;
- Strategize how climate assessment gaps can be addressed through establishing and supporting new engagement partnerships;
- Outline recommendations for an engagement infrastructure that both ensures bottom-up partnerships for assessment with end users and boundary entities and for tailoring scientific assessment for decision relevance and knowledge coproduction;
- Enable successful evaluation of partnership support and progress during the sustained assessment process.

Topic 4: Fostering Evaluation of the Sustained Assessment Process and Use of NCA Products in Decision Making

Following the release of NCA3, USGCRP convened a workshop that developed recommendations for evaluation of NCA3 outcomes (https://tinyurl.com/zw82eqn), and an appraisal of the process was completed (https://tinyurl.com/lgkxa5n; https://tinyurl.com/lt7zsss). Additional evaluation is needed to support ongoing improvement of the SNCA process and provision of decision-support products. The Advisory Committee will develop recommendations for expanding opportunities to foster evaluation and improve adaptive management of the assessment.

- Recommendations will address specific topics such as:
 - Incentivize agencies to collect data that would be available and accessible for evaluation researchers and practitioners (longitudinal and cross-sectional data);
 - Design of evaluation protocols and approaches that assess different kinds of impacts (outputs, outcomes, gap analysis, societal impacts);
 - Design of approaches that contribute to/encourage sustained relationships (coproduction, participatory evaluations, focus groups);
 - Better understanding of needs of agencies, stakeholders, and users.

Elements of Process:

The Advisory Committee will prepare its recommendations through a transparent process that meets the requirements of the Federal Advisory Committee Act. It will solicit public input, consult subject matter experts, review prior recommendations, provide interim findings (in summary form), request feedback from the SGCR, issue a draft report for public comment, and publish a final report with recommendations.